

*(Signature)* Please add new claims 40 and 41 as follows: *(Signature)*

*(Signature)* 40. The composition of claim 1 wherein said shell comprises zinc pyrithione, and said core comprises zinc or a zinc-containing compound selected from zinc oxide and zinc selenide.

*(Signature)* 41. The composition of claim 38 wherein said shell comprises zinc pyrithione, and said core comprises zinc or a zinc-containing compound selected from zinc oxide and zinc selenide. --

#### REMARKS

Entry of this Response is respectfully requested. Responsive to the restriction requirement described in Paragraph 1 of the outstanding Office Action, applicants hereby confirm the provisional election of Group I, and notes that claims 1 and 38 are in consideration. Accordingly, claims 2-37 and 39, not in consideration, have been cancelled as drawn to a non-elected invention. New claims 40 and 41 claim a zinc pyrithione shell, and zinc or a zinc compound as a core, as supported by the disclosures provided at page 20 (Table 2 and Proposed Example 24) of the instant specification.

#### The Invention

The invention is as claimed in instant claims 1 and 38 biocidal composition containing composite particles comprising, as a shell, a pyrithione adduct, together with a core. In claim 1, the core comprises a metal or metal-containing compound from a specified Markush group, and the pyrithione adduct shell comprises the reaction product of pyrithione with a portion of the core. In claim 38, the core comprises a filler or biocide, and the shell comprises the reaction product of a portion of the core with pyrithione.

#### Rejections under 35 USC §102

Claims 1 and 38 stand rejected under 35 USC §102(b) as anticipated over the Bernstein '971 patent, as noted in paragraph 3 of the outstanding Office Action. This rejection is believed to be untenable since the '971 patent nowhere discloses or suggests the instant composite particles. Instead, the '971 patent discloses salts of pyrithione (e.g., in Example 16 thereof) in solution and as a white precipitate. Although column 10 of this

patent does disclose a physical mixture of pyrithione salts with soil, there is no disclosure or suggestion that a composite particle is formed as instantly claimed. In other words, the '971 patent discloses physical mixtures of soil with pyrithione salts, not composite particles wherein the shell comprises the reaction product of pyrithione with a portion of the core. The instantly claimed composite particles are nowhere disclosed or suggested by this patent, alone or in combination with other cited reference(s), as discussed in more detail hereinbelow.

Claims 1 and 38 stand rejected under 35 USC §102(e) as anticipated by Oppong '960 and the Bernstein '971 patent, as noted in paragraph 4 of the outstanding Office Action. This rejection is believed to be untenable since the synergistic combinations of ionene polymers and pyrithione salts are, once again, physical mixtures, not composite particles wherein the shell comprises the reaction product of pyrithione with a portion of the core. Column 8, lines 56-65 of the '960 patent describes such physical mixtures, and states that they can be in liquid or solid form.

The inherency argument posed at the bottom of page 4 of the outstanding Office Action is believed to be untenable since the chemical attributes of the instant composite particles are different from that of a physical mixture because the instant shell comprises the reaction product of pyrithione with a portion of the core. The instantly claimed composite particles are nowhere disclosed or suggested by the cited prior art.

Claims 1 and 38 stand rejected under 35 USC §102(e) as anticipated over the Roenigk '271 patent, as noted in paragraph 5 of the outstanding Office Action. This rejection is traversed since this patent teaches potentiation of chitosan by pre-chelation with zinc ion followed by potentiation of the resulting zinc-chitosan complex with an antimicrobial additive, such as pyrithione, to provide a chitosan-zinc-pyrithione complex for use on sponges. There is no disclosure or suggestion of composite particles as instantly claimed. Therefore, this rejection is believed to be untenable and should be withdrawn.

Claims 1 and 38 also stand rejected under 35 USC §102(b) over two Japanese patent abstracts, one to Nagata, and the other to Fujita, as noted in paragraphs 6 and 7 of the outstanding Office Action, respectively. Both of these Japanese patent abstracts describe physical mixtures, not composite particles, and therefore neither reference is suggestive of the instantly claimed invention.

Enclosed herewith is a Supplemental Information Disclosure Statement citing a recently discovered patent issued on June 29, 1999, namely the Morris '947 patent. The '947 patent discloses a particle mixture of zinc oxide with a photosensitizer in "photoelectric proximity" to the zinc oxide. Zinc pyrithione is said to be a photosensitizer in the '947 patent,

and Example 4 of that patent describes a coating composition containing both zinc oxide and zinc pyrithione. It is applicants' position that the particle mixtures described in the '947 patent are also physical mixtures, not composite particles, and therefore this patent does not disclose or suggest the present invention. Therefore, a *prima facie* case of obviousness has not been established.

Accordingly, applicants submit that none of the above-discussed references, alone or in combination, anticipate or make obvious the invention as presently claimed. Applicants believe that the application is now in condition for allowance. Therefore, Applicants respectfully request reconsideration of the claims as amended, and an early receipt of a Notice of Allowance thereof.

If the Examiner has any questions or believes that a discussion with Applicant's attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

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Respectfully submitted

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